

UNITED STATES DISTRICT COURT  
WESTERN DISTRICT OF MICHIGAN  
SOUTHERN DIVISION

STRYKER CORPORATION and	)	
STRYKER SALES CORPORATION,	)	
Plaintiffs,	)	
	)	No. 1:16-cv-1199
-v-	)	
	)	Honorable Paul L. Maloney
POSEIDON SURGICAL, LLC,	)	
Defendant.	)	
	)	

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**CLAIM CONSTRUCTION OPINION AND ORDER**

Plaintiff Stryker Corporation has developed the Neptune 2 Waste Management System, a portable machine that assists in the collection and disposal of medical waste. This lawsuit concerns a disposable device called a manifold, which connects to the Neptune 2. Stryker Corporation owns a patent for its manifold, titled "Removable Inlet Manifold for a Medical/Surgical Waste Collection System," Patent Number 7,615,037 (Patent '037). Plaintiff Stryker Sales Corporation is the exclusive distributor for the Stryker manifold. Defendant Poseidon Surgical makes a manifold that is compatible with the Neptune 2.<sup>1</sup> Plaintiffs allege that Poseidon's manifold infringes Stryker Corporation's patent.

For most patent infringement disputes, the court begins by construing the language in the patent's claims. The parties have offered differing interpretations about certain terms and phrases in Stryker's patent. The Court has been asked to construe the two phrases in the

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<sup>1</sup> Since the lawsuit was filed, Poseidon Surgical has changed its name to 5X Surgical. The caption for this lawsuit has not been changed and, in this Opinion, the Court will refer to the defendant as Poseidon.

patent, "said housing having: opposed proximal and distal ends" and "a longitudinal axis that extends between the proximal and distal ends and through the proximal section and the housing void space". The Court has had the benefit of two sets of briefs from each side and has held two hearings.

## I.

Patent '037 contains twenty claims: three independent claims (1, 8, and 14) and seventeen dependent claims. The disputed terms and phrases appear in all three independent claims. Claim 1 reads as follows:

A manifold for connection to a receiver of a medical/surgical waste collection system, the receiver having a rotating valve disk that selectively allows/blocks fluid flow through the receiver, the valve disk having a longitudinal axis that extends through the valve disk, said manifold including:

a housing, said housing having: opposed proximal and distal ends; a proximal section that extends forward from the proximal end, the proximal section at least partially defining a housing void space; a longitudinal axis that extends between the proximal and distal ends and through the proximal section and the housing void space and wherein, at least the proximal section is shaped to be disposed in the waste collection unit receiver and, when, in the receiver, rotate about the housing longitudinal axis;<sup>2</sup>

(ECF No. 1-1 Patent '037 Col. 20 Lines 60-67 PageID52 and Col. 26 Lines 1-8 PageID.53.)

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<sup>2</sup> The disputed phrases in each independent claim are found in the passage describing the housing of the manifold. The passages in Claims 8 and 14 are the identical. The passage in claim 1 differs in two minor ways. First, Claims 8 and 14 add the word "housing" before the term "proximal section" to the phrase following the word "wherein." Claims 8 and 14 read "and wherein, at least the *housing* proximal section is shaped . . ." Second, Claim 1 includes a comma that Claims 8 and 14 do not have. Claims 8 and 14 read "collection unit receiver and, when in the receiver, rotate . . ." The additional comma in Claim 1 is likely a typographical error. The parties have not argued that either difference between Claim 1 and Claims 8 and 14 affect the outcome of this dispute.

Initially, the parties focused their competing interpretations on two phrases. The parties disputed the proper interpretation of the phrase "said housing having: opposed proximal and distal ends." For this first dispute, the parties disagreed about how the word "opposed" should be interpreted. The parties also dispute the proper interpretation of the phrase "a longitudinal axis that extends between the proximal and distal ends and through the proximal section and the housing void space." For this second dispute, the parties disagreed about how the word "between" should be interpreted.

After a hearing, the Court requested that the parties each submit additional briefs addressing the phrase "through the proximal section and the housing void space." The Court concluded that the second dispute, the competing interpretations of the word "between," could not be resolved without interpreting the entire phrase.

## II.

Patent infringement analysis involves two steps. In the first step, the meaning and scope of the patent claims are determined. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995) (en banc) *aff'd*, 517 U.S. 370 (1996). In the second step, the construed claims are applied to the allegedly infringing device. *Id.*; see *Multiform Desiccants, Inc. v. Medzam, Ltd.*, 133 F.3d 1473, 1476 (Fed. Cir. 1998) ("Since a full and complete understanding of the scope of the claims is requisite to determining whether the patent is infringed, technical terms or words of art or special usages in the claims, if in dispute, are construed or clarified by the court before the construed claims are applied to the accused device.").

The first step, commonly called “claim construction,” is a matter of law reserved exclusively for the court. *Markman*, 52 F.3d at 976-79. The purpose or goal of claim construction is “neither to limit nor to broaden the claims, but to define, as a matter of law, the invention that has been patented.” *Netword, LLC v. Centraal Corp.*, 242 F.3d 1347, 1352 (Fed. Cir. 2001). “It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (*en banc*) (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys, Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). The Federal Circuit Court of Appeals has explained that an appropriate analogy for claim construction is statutory interpretation. *Markman*, 52 F.3d at 987 (explaining that both involve questions of law, both involve an analysis of words on a written document, both begin with a focus on the language in the document with the interpretation of the language governed by axioms and canons of construction, and in both there is only one correct interpretation).

Claim construction is required where the meaning or scope of technical words or terms of art are unclear. *United States Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (1997). Claim terms must be given their plain and ordinary meaning, as those terms are understood by persons skilled in the relevant art at the time of the invention. *Phillips*, 415 F.3d at 1313. But, claim construction is “not an obligatory exercise in redundancy.” *Ethicon*, 103 F.3d at 1568. “In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of

commonly understood words.” *Phillips*, 415 F.3d at 1314. Accordingly, a court need not “repeat or restate every claim term in order to comply with the ruling that claim construction is for the court.” *Ethicon*, 103 F.3d at 1568.

When determining the proper construction of a claim, a court consults intrinsic sources and then, if necessary, extrinsic sources. Intrinsic sources consist of “the patent itself, including the claims, the specification and, if in evidence, the prosecution history.” *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996); *see Netword*, 242 F.3d at 1352; *Markman*, 52 F.3d at 979 (quoting *Unique Concepts, Inc. v. Brown*, 939 F.2d 1558, 1561 (Fed. Cir. 1991)). “It is well settled that . . . the court should look first to the intrinsic evidence of record . . . . Such intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language.” *Vitronics Corp.*, 90 F.3d at 1582 (internal citation omitted). The intrinsic evidence forms the “public record” of the patentee’s claim. *Id.* at 1583. “[C]ompetitors are entitled to review the public record, apply the established rules of claim construction, ascertain the scope of the patentee’s claimed invention and, thus, design around the claimed invention.” *Id.* “Extrinsic evidence is that evidence which is external to the patent and the file history,” including expert testimony and testimony from the inventor. *Id.* at 1584; *see Metabolite Labs., Inc. v. Lab. Corp. of America Holdings*, 370 F.3d 1354, 1360-61 (Fed. Cir. 2004). When intrinsic evidence unambiguously describes the scope of the patented invention, it would be improper for a court to rely on extrinsic evidence. *Vitronics Corp.*, 90 F.3d at 1583; *see Pall Corp. v. Micron Separation, Inc.*, 66

F.3d 1211, 1216 (Fed. Cir. 1995) (“Extrinsic evidence may also be considered, if needed to assist in determining the meaning or scope of technical terms in the claims.”).

In cases where the meaning of the disputed terms and phrases appear “readily apparent even to lay judges,” “general purpose dictionaries may be helpful.” *Phillips*, 415 F.3d at 1314. For claim construction, dictionaries “are worthy of special note” and “[j]udges are free to consult such resources at any time.” *Vitronics Corp.*, 90 F.3d at 1584 n.6; *see Interactive Gift Express, Inc. v. Compuserve, Inc.*, 256 F.3d 1323, 1332 n.1 (Fed. Cir. 2001) (“Dictionaries, which are a form of extrinsic evidence, hold a special place and may sometimes be considered along with the intrinsic evidence.”). Dictionary definitions may be considered “when construing claim terms, so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents.” *Vitronics Corp.*, 90 F.3d at 1584 n.6. Although the Federal Circuit has “never held” that non-scientific dictionaries cannot be used, the circuit has “cautioned against” their use “lest dictionary definitions . . . be converted into technical terms of art having legal, not linguistic significance.” *Dow Chem. Co. v. Sumitomo Chem. Co., Ltd.*, 257 F.3d 1364, 1372-73 (Fed. Cir. 2001) (collecting cases).

When engaged in the construction of claims, courts begin by looking to the words of the claims themselves to define the scope of the patented invention. *Vitronics Corp.*, 90 F.3d at 1582; *Innova/Pure*, 381 F.3d at 1116 (“[A] claim construction analysis must begin and remain centered on the claim language itself, for that is the language of the patentee has chosen ‘to particularly point[] out and distinctly claim[] the subject matter which the patentee

regards as his invention.”” (quoting *Interactive Gift Express*, 256 F.3d at 1331). “The touchstone for discerning the usage of claim language is the understanding of those terms among artisans of ordinary skill in the relevant art at the time of the invention.” *Metabolite*, 370 F.3d at 1360; see *Phillips*, 415 F.3d at 1313 (“We have made clear, moreover, that the ordinary and customary meaning of a claim term is the meaning that the term would have had to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.”). Such inquiry provides “an objective baseline from which to begin claim construction.” *Id.*; see *Innova/Pure*, 381 F.3d at 1116 (“The inquiry into the meaning that claim terms would have to a person of skill in the art at the time of the invention is an objective one.”); *Markman*, 52 F.3d at 986 (“[T]he focus is on the objective test of what one of ordinary skill in the art at the time of the invention would have understood to term to mean.”).

The second step in claim construction is to review the patent specification. Claims must always be read in view of the specification, which “is highly relevant to the claim construction analysis. Usually it is dispositive; it is the single best guide to the meaning of a disputed item.” *Vitronics Corp.*, 90 F.3d at 1582; see *Phillips*, 415 F.3d at 1315-16 (collecting cases which have “long emphasized the importance of the specification in claim construction.”). After looking at the claim language, a court must “always [ ] review the specification to determine whether the inventor has used any terms in a manner inconsistent with their ordinary meaning.” *Vitronics Corp.*, 90 F.3d at 1582 (alteration added); see *Phillips*, 415 F.3d at 1316 (“[T]he specification may reveal a special definition given to a

claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor's lexicography governs."). "[T]he specification may reveal an intentional disclaimer, a disavowal, or claim scope by the inventor. In that instance as well, the inventor has dictated the correct claim scope, and the inventor's intention, as expressed in the specification, is regarded as dispositive." *Phillips*, 415 F.3d at 1316.

When reviewing the specification, the court must keep in mind two axioms: (1) the claim must be construed with a view of the specification and (2) the court may not read a limitation into a claim from the specification. *Innova/Pure*, 381 F.3d at 1117; see *Playtex Prods., Inc. v. Proctor & Gamble Co.*, 400 F.3d 901, 906 (Fed. Cir. 2005) (noting both axioms). The Federal Circuit has recognized that the two axioms create a "fine line" between an acceptable claim construction and an unacceptable one. See *Comark Comm'ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1186 (Fed. Cir. 1998). Although courts should consider the specification, where the claim language is clear, the specification review "is restricted to determining if a deviation from the clear language of the claims is specified." *Interactive Gift*, 256 F.3d at 1331. The problem becomes particularly acute when "the written description of the invention is narrow, but the claim language is sufficiently broad that it can be read to encompass features not described in the written description, either by general characterization or by example in any of the illustrative embodiments." *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 905 (Fed. Cir. 2004). In these situations, courts should remember to look to the specification to "ascertain the meaning of the claim term as it is

used by the inventor in the context of the entire invention,' and not merely to limit a claim term." *Interactive Gift*, 256 F.3d at 1332 (quoting *Comark Commc'ns*, 156 F.3d at 1187).

The Federal Circuit cautioned that "particular embodiments and examples appearing in the specification will not generally be read into the claims." *Comark Commc'ns*, 156 F.3d at 1187. Furthermore, when the specification contains only a single embodiment, the claim should not be read so restrictively, "unless the patentee has demonstrated a clear intent to limit the claim scope using 'words or expressions of manifest exclusion or restriction.'" *Innova/Pure*, 381 F.3d at 1117 (quoting *Liebel-Flarsheim*, 358 F.3d at 906); *see ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1091 (Fed. Cir. 2003) ("Where the written description does not expressly limit the claim term and otherwise supports a broader interpretation, we are constrained to follow the language of the claims and give the claim term its full breadth of ordinary meaning as understood by persons skilled in the art.") (internal quotation and citation omitted).

Conversely, when the specification makes clear that the description of a particular embodiment is an essential characterization of the invention, the claim will not encompass a broader subject. *See Anderson Corp. v. Fiber Composites, LLC*, 474 F.3d 1361, 1367 (Fed. Cir. 2007). Along the same lines, when the specification "makes clear that the invention does not include a particular feature, that feature is deemed outside the reach of the claims of the patent, even though the language of claims, read without reference to the specification, might be considered broad enough to encompass the feature in question." *Scimed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1341 (Fed. Cir. 2001).

Courts may also consider the prosecution history as intrinsic evidence indicative of the meaning of the claim language. The prosecution history, if in evidence, contains the complete report of the proceedings before the Patent and Trademark Office (PTO), including representations by the patentee regarding the scope of the claims. *Vitronics Corp.*, 90 F.3d at 1583. The prosecution history may include prior art cited during the examination of the patent. *Phillips*, 415 F.3d at 1317. While the prosecution history is “often of critical significance in determining the meaning of the claims,” *Vitronics Corp.*, 90 F.3d at 1583, because it represents an “ongoing negotiation between the PTO and the applicant, rather than the final product of the negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes,” *Phillips*, 415 F.3d at 1317. “Nonetheless, the prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention in the course of prosecution and whether the inventor limited the invention in the course of the prosecution, making the claim scope narrower than it otherwise would be.” *Id.* (citing *Vitronics Corp.*, 90 F.3d at 1582-83). Like the specification, the prosecution history should be used to understand the claim language and should not be used to “enlarge, diminish, or vary’ the limitations in the claims.” *Markman*, 52 F.3d at 980 (quoting *Goodyear Dental Vulcanite Co. v. Davis*, 102 U.S. 222, 227 (1880)).

When the claims remain ambiguous even after an examination of the intrinsic evidence, a court may rely on extrinsic evidence, to interpret the claim. *Phillips*, 415 F.3d at 1317 (citing *Markman*, 52 F.3d at 980). “The court may, in its discretion, receive extrinsic

evidence in order ‘to aid the court in coming to a correct conclusion’ as to the ‘true meaning of the language employed’ in the patent. *Markman*, 52 F.3d at 980 (quoting *Seymour v. Osborne*, 72 U.S. (11 Wall.) 516, 546 (1871)). Like both the specification and the prosecution history, extrinsic evidence “is to be used for the court’s understanding of the patent, not for the purpose of varying or contradicting the terms of the claims.” *Id.* at 981 (citing *United States Indus. Chems, Inc. v. Carbide & Carbon Chems Corp.*, 315 U.S. 668, 678 (1942)); see *Vitronics Corp.*, 90 F.3d at 1584 (“[I]t may not be used to vary or contradict the claim language. Nor may it contradict the import of other parts of the specification. Indeed, where the patent documents are unambiguous, expert testimony regarding the meaning of a claim is entitled to no weight.” (internal citation omitted)).

Finally, the conclusion that a claim term or phrase has a plain and ordinary meaning and does not need to be construed does not necessarily resolve the dispute. *See O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co., Ltd.*, 521 F.3d 1351, 1361 (Fed Cir. 2008). For claim construction, the court must resolve disputes about the meaning of terms and disputes about the scope of the patent. *Id.* at 1362; *see Eon Corp. IP Holdings, LLC v. Silver Spring Networks, Inc.*, 815 F.3d 1314, 1318 (Fed. Cir. 2016). However, at the claim construction stage, courts should be cautious and limit the conclusions to the meaning and scope of a claim, and not resolve infringement questions. *Eon Corp.*, 815 F.3d at 1319.

### III.

#### A. said housing having: opposed proximal and distal ends<sup>3</sup>

Plaintiffs argue that the phrase does not need construction because its meaning is obvious, even to a lay person. Alternatively, Plaintiffs interpret this phrase to mean "a housing with proximal and distal ends, where the distal end is part of the housing that is opposite the proximal end." Poseidon interprets the phrase to mean "said housing having: a proximal end and a distal end that face each other."

The Court concludes that the word "opposed" does not need construction. The meaning of the word "opposed" is "readily apparent even to lay judges." *Phillips*, 415 F.3d at 1314. Nothing in the patent suggests that the term has "a special meaning to those skilled in the art." *Howes v. Medical Components, Inc.*, 814 F.2d 638, 643 (Fed. Cir. 1987). Nothing in the patent suggests that the inventor has used the word "opposed" as a term of art or as a technical term. *See, e.g., Kustom Signals, Inc. v. Applied Concepts, Inc.*, 264 F.3d 1326, 1331 (Fed. Cir. 2001) ("The district court construed 'or' and 'either' in their common usage as designating alternatives. We agree with this construction, for there is no indication that Kustom used these words with a different meaning."). The parties have not presented any

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<sup>3</sup> Proximal and distal are adjectives describing distance to some reference point. Ordinarily, proximal means "closer to" and distal means "away from." With this ordinarily meaning, the patent's use of the terms proximal and distal makes the Neptune 2 the reference point. Thus, the proximal end of the manifold is closer to the Neptune 2 than the distal end of the manifold. Curiously, in the overview of the description of the device, the patent defines "distal" as "towards the surgical site," and "proximal" as "away from the surgical site." (Patent '037 Col. 4 Lines 32-34.)

evidence that a disputed term has some "specialized technical meaning in the art." *Gemstar-TV Guide Int'l, Inc. v. Int'l Trade Comm'n*, 383 F.3d 1352, 1366 (Fed. Cir. 2004).

As guidance for the parties, the Court concludes Plaintiff's proposed construction reflects how the term "opposed" should be construed within the disputed passage. Persons skilled in the relevant art, and lay judges, understand from the context of the claim language that the proximal and distal ends must be on opposite ends of the housing. Opposed and opposite are merely different forms of the same word.

First, Poseidon's interpretation, that the two ends must face each other, adds a limitation that is not required by the word "opposed." Ends that are opposed may, but are not required to, face each other. Lay judges and persons of ordinary skill in the art understand that, for some geometric shapes, opposed ends do not face each other. For example, a trapezoid contains two sets of opposed sides: two parallel sides that do face each other and two angled sides that do not face each other.

Second, Poseidon has not established that the patent requires the manifold be cylindrical. Essential to its interpretation, Poseidon points to the description of the embodiment of the invention to assert that the manifold must be cylindrical (Patent '037 Col. 9, Lines 7-9) and the manifold cap must be circular (*id.* Col. 10, Lines 48-51). Poseidon contends that opposed ends of a cylinder face each other. But, the language in the independent claims does not require the manifold to have a cylindrical shape. Some of the dependent claims, Claims 2, 9, and 18, do describe a base-plate as being circular, so that the housing would also circularly shaped. Intuitively, the shape of the manifold is not

determined by the manifold patent, but by the shape of the opening in the Neptune 2 where the manifold is inserted. It would be pointless to patent a manifold that required a certain shape, if that shape did not fit the receiving unit. All three independent claims reflect this intuition: "the proximal section is shaped to be disposed in the waste collection unit receiver." (Patent '37 Col. 21 Lines 5-6; Col. 22 Lines 16-18; Col. 23 Lines 25-27.) And, even if the manifold is cylindrical, not all cylinders have opposing ends that face each other. A child's toy periscope is cylindrically shaped, but the mirrors that form the ends are at parallel 45 degree angles that do not face each other. If the two mirrors did face each other, the periscope would not work.

Third, the descriptive words proximal and distal have a purpose other than to indicate that the ends are opposed. Describing the ends as proximal and distal does not necessitate that the ends face each other in order for the word "opposed" to have meaning. Proximal and distal describe the orientation of the manifold housing ends relative to some external reference point, the surgical site. Put another way, the words proximal and distal are used to distinguish which end of the manifold connects to Neptune 2 and which end is closest to the surgical site.

Fourth, Poseidon imports the facing limitation from examples found in the specification. By relying on particular embodiments found in the specification, Poseidon's interpretation adds an unnecessary limitation to the claimed invention. Poseidon's examples where the inventor has used the words "opposed" and "opposite" do not demonstrate that the inventor has used the "terms in a manner inconsistent with their ordinary meaning." *Vitronics*

*Corp.*, 90 F.3d 1582. Although the quoted examples describe portions of the invention that are opposed and that face each other, the examples do not establish that the inventor necessarily requires all opposed structures within the invention to face each other. Indeed, it is not even clear from the examples in the specification that the particular structures cited by Poseidon must include elements that face each other. (*E.g.*, Patent '037 Col 7, Lines 50-53 "In one version of the invention, seal 112 is a C- or U-shaped seal. A spring 113 presses the opposed sides of the seal outwardly."). And, although the illustration of the manifold in the patent may have flat proximal and distal ends that could be interpreted as facing each other, nothing in the claim or specification language *requires* that particular configuration. Where the inventor has not revealed an intentional deviation from the ordinary meaning of the term, courts should not read a limitation into the claim from the specification. *See Innova/Pure*, 381 F.3d at 1117.

**B. "a longitudinal axis that extends between the proximal and distal ends and through the proximal section and the housing void space"**

Plaintiffs again argue that this disputed phrase does not need construction. Alternatively, Plaintiffs argue the phrase means "an imaginary line about which the housing rotates that extends: a) in a space that separates the proximal and distal ends of the housing, and b) stretches in and out of the portion of the manifold housing that is disposed in the waste collection unit receiver." Poseidon argues the phrase should be interpreted to mean "a single imaginary straight line that extends the length of the housing from the proximal end to

the distal end and through the interior space of the housing, and about which the housing rotates."

The disputed claim phrase requires the longitudinal axis (1) to extend between two ends, and (2) to extend through proximal section and the housing void space. The claim also requires the housing to rotate around the longitudinal axis. The noun or subject of the phrase is "axis" and the verb or action is "extends." The phrase contains two prepositional phrases describing what the axis does; it extends between and it extends through. Importantly, the independent claims do not require the axis to extend through the proximal and distal ends.

### **1. Between the Proximal and Distal Ends**

The Court concludes that the word "between" does not require construction. The meaning of the word is obvious, even to lay judges. Nothing in the patent suggests that the inventor has used "between" as a technical terms or a term of art. And, the parties have not submitted any evidence to show that the inventor has used the word with some specialized, as opposed to ordinary, meaning.

As guidance for the parties, the Court will construe the phrase. "Between the proximal and distal ends," requires the line (the axis) to exist, at least in part, in the space separating the proximal and distal ends.<sup>4</sup> Persons ordinarily skilled in the art, and lay judges, understand from the context of the claim language that the longitudinal axis is a straight line, that there

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<sup>4</sup> This interpretation is consistent with dictionary definitions of the word "between." For example, Webster's New Universal Unabridged Dictionary (2d ed. 2003 pg. 200) offers, as the first definition for "between", "in the space separating (two points, objects, etc.)."

is a space in the manifold housing between the two ends, and that the line must be in that space. The construction offered by the two parties is more similar than different. Both parties agree that the axis is a straight line. And, both parties agree that the axis must be in the space in the housing manifold.

The disagreement between the parties concerning the word "between" is whether the axis must pass through the ends as well as the space between the ends. The axis is a line, not a line segment; it extends infinitely in both directions and the housing manifold must rotate around it.<sup>5</sup> Poseidon's interpretation necessarily requires the axis to intersect and to pass through the proximal and distal ends. Because the axis is a line, and because Poseidon construes that line to extend the length of the housing from the proximal to the distal end, the axis must also extend through the two ends. As a line, the axis does not stop just before the proximal and distal ends.

Poseidon's interpretation is flawed for two reasons. First, the interpretation conflates the words "between" and "through." If the inventor wanted the axis to go through the ends and through the housing void space, the claim would say so. The claim, however, only requires the axis to extend between the ends, not through the ends.

The second flaw in Poseidon's interpretation is that it adds a limitation that is not found in the claim language. A different passage in each of the independent claims require

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<sup>5</sup> Poseidon explicitly rejects an interpretation where the axis is a line segment. In one of its response briefs, Poseidon argues "the longitudinal axis is not some theoretical segment of arbitrary length, but is rather the axis, that is, a line, of the housing that extends between the two housing ends." (ECF No. 49 at 3-4 PageID.856-57; *see id.* at 9 PageID.862.)

the axis to extend through the base plate at the proximal end of the manifold. All three independent claims describe a base plate forming the proximal end of the manifold housing and that "said base plate having a center through which the housing longitudinal axis extends . . ." (Patent '037 Col. 21 Lines 17-18; Col. 22 Lines 33-34; Col. 23 Lines 37-38.) No such similar language describes the relationship between the axis and the distal end. If the two ends were parallel and faced each other, then the longitudinal axis would have to extend through the distal end. But, this Court has already concluded that the invention does not require the two ends face each other. And, because the inventor used the word "between" rather than "through" to describe the spatial relationship of the ends and the axis, the claim does not require that the axis pass through the distal end.

## **2. Through the Proximal Section and Housing Void Space**

The axis must extend through the proximal section and the housing void space. Plaintiff's construe this phrase to require the line (the axis) to stretch in and out of the portion of the manifold housing that is disposed in the waste collection receiver unit. Poseidon construes this phrase to require the line (the axis) to extend through the interior space of the housing.

The dispute between the parties is on the length of the housing void space. Poseidon insists the housing void space refers to the entire interior space of the manifold, of which only part is the proximal section. Plaintiffs construe the phrase "housing void space" as referring to the area inside the proximal section of the housing. Plaintiffs reason that the critical or essential feature of the patent is the offset valve disk, which is located on the base

plate in the proximal end. Plaintiff conclude that the claims do not describe or otherwise limit the construction of the distal end.

For this disputed phrase, the Court first discusses the word "through." "Through" does not need construction. It is not a technical term or term of art. Nothing in the claim language suggests that the inventor used the term in a manner different from its ordinary meaning. For guidance, the term "through" means to go "in one side and out the opposite or another side of." American Heritage Dictionary (3d. ed. 1996 pg. 1870.) Put in context, the axis must go in one side and out a different side of both the proximal section and the housing void space.

The patent does not explicitly define the term "proximal section." The patent does provide some language that limits the term. The patent identifies where the proximal section begins: it extends forward from the proximal end. (Patent '037 Col. 20 Line 66 and Col. 21 Line 1.) The patent requires the base plate to extend over the proximal end. And, because the axis must extend through the base plate, it also must extend through the proximal section. The axis enters the proximal section at the proximal end and exits the proximal section somewhere other than the base plate.

The patent also does not explicitly define the phrase "housing void space." Taking in context all of the descriptions of the housing void space in the patent, the housing void space is the open area inside the manifold housing where the waste collects before the fluid flows through the valve disk and into the waste collection receiver. The specification offers a short description: "internal to this housing is a void space." (Patent '037 Col. 9 Line 2.) The patent

states that the proximal end of the housing defines the proximal end of the housing void space. (*Id.* Col. 21 Lines No. 14-15.) Fluid enters the housing void space from the distal end of the manifold. (*Id.* Col. 21 Lines 9-12.) The waste material in the manifold will move or flow "towards the opposite side of the void space internal to the manifold." (*Id.* Col. 16 Lines 14-15.) The independent claims further describe the collected fluid as flowing from the housing void space to waste collection unit. (*Id.* Col. 21 Lines 19-20; Col. 22 Lines 36-38; Col. 23 Lines 39-42.)

For this disputed phrase, Poseidon generally has the better construction. The claim requires the axis to extend through two areas, the proximal section and the housing void space. The terms "proximal section" and "housing void space" are not redundant. Plaintiffs' interpretation fails to give meaning the word "and." The independent claims anticipate that, for some configurations of the manifold, the proximal section and the housing void space will overlap completely, but in other configurations, the housing void space will encompass a larger area than the proximal section. All three independent claims state "a proximal section that extends forward from the proximal end, the proximal section *at least partially* defining a housing void space." (Patent '037 Col. 20, Line 67 to Col. 21 Lines 1-2; Col. 22, Lines 11-13; Col. 23, Lines 20-22.).

The disputed phrase does not, however, require the axis to extend through the entire housing void space from the distal end to the proximal end. The axis must extend through the proximal end because the axis passes through the base plate. The patent requires the axis to extend through the proximal section and the housing void space. No language in

patent requires the axis to pass through and exit at the distal end. The word "through" only requires that the axis exit the housing void space at some side other than where it entered.

#### IV.

Poseidon has not demonstrated that the prosecution history conclusively supports its construction of the disputed terms. Poseidon contends, in several places, that the prosecution history supports its interpretation. Poseidon insists that the Patent Office rejected the invention on the basis of the prior art until Stryker added the disputed phrase "a longitudinal axis that extends between the proximal and distal end and through the proximal section and the housing void space." But, all this establishes is that the disputed terms are critical to the patent. As the Court understands the invention, the distinguishing feature is that the rotating valve is offset from the longitudinal axis. The Court has diligently endeavored to follow Poseidon's reasoning here. In the Court's mind, there is a disconnect between Poseidon's premise (this disputed term was added to secure the approval of the patent) and its conclusion (Poseidon's interpretation is supported by the prosecution history). That the rotating valve is offset from longitudinal axis does not require the conclusion that the axis must pass through the distal end of the manifold.

#### V.

The Court has construed the two phrases disputed by the parties, "said housing having: opposed proximal and distal ends" and "a longitudinal axis that extends between the proximal and distal ends and through the proximal section and the housing void space." Generally, as used in the patent, the words "opposed," "between," and "through" are not terms

of art or technical terms. The proximal and distal ends are on opposite ends of the manifold, but need not face each other. The axis around which the manifold rotates must extend through the proximal end, the proximal section, and the housing void space. But, the axis does not have to extend through the distal end. By extending through the housing void space, the axis extends in the space between the two ends, without necessarily passing through the proximal end.

**IT IS SO ORDERED.**

Date: May 24, 2018

/s/ Paul L. Maloney  
Paul L. Maloney  
United States District Judge